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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/540,689	04/17/2006	Shu Zhang	CN02 0036 US1	8969
65913	7550	07/31/2008		
NXP, B.V. NXP INTELLECTUAL PROPERTY DEPARTMENT M/S41-SJ 1109 MCKAY DRIVE SAN JOSE, CA 95131				
EXAMINER				
KHAN, MEHMOOD B				
ART UNIT		PAPER NUMBER		
2617				
NOTIFICATION DATE		DELIVERY MODE		
07/31/2008		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ip.department.us@nxp.com

### Office Action Summary

**Application No.**

10/540,689

**Applicant(s)**

ZHANG, SHU

**Examiner**

MEHMOOD B. KHAN

**Art Unit**

2617

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05/01/2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 3-5, 7, 10-12, 14, 17-19, 21-24 is/are allowed.
- 6) ☒ Claim(s) 1, 2, 6, 8, 9, 13, 15, 16 and 20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/808)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Arguments***

Applicant's arguments with respect to claims 1, 8 and 15 have been considered but are moot in view of the new ground(s) of rejection.

### ***Allowable Subject Matter***

Claims 3-5, 7, 10-12, 14, 17-19, 21 and 22-24 are allowable for reasons stated in the previous office action.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1, 8, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nelson et al. (US 2003/0060224 herein Nelson) in view of Baker et al. (US 2002/0094834 herein Baker).**

Claim 1, Nelson discloses a method for controlling a mobile terminal's transmit power in CDMA-TDD system (**Abstract, 0013, 0048**), Nelson discloses (a) receiving a power control message from a base-station transmitted via a downlink (**0047, where Nelson discloses a maintenance channel**); Nelson discloses (b) acquiring a channel gain value between said mobile terminal and said base-station according to information

transmitted via the downlink (**Fig. 9: 930, where Nelson discloses computing path loss**); Nelson discloses (c) calculating a value of the transmit power of said mobile terminal according to said power control message, said channel gain value and a set processing gain value (**Fig. 9: 950, where Nelson discloses transmit power, it is well known in the art that the processing gain is the ratio of the spread bandwidth to un-spread bandwidth of the signal**); Nelson discloses (d) adjusting the transmit power of said mobile terminal according to said value of the transmit power (**Fig. 9: 975, where Nelson disclose increasing power**), Nelson discloses wherein said adjusting the transmit power of said mobile terminal is synchronized with those of other terminals assigned within a same time slot for simultaneous adjustment (**Abstract, 0051, 0052, where Nelson discloses adjusted power based on synchronization signal**).

Nelson does not explicitly disclose wherein the value of the transmit power of said mobile terminal and said other terminals assigned within the same time slot are simultaneously calculated.

In an analogous art, Baker discloses wherein the value of the transmit power of said mobile terminal and said other terminals are simultaneously calculated (**0026, where Baker discloses parallel power control loops and controlling the power of uplink transmissions**). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Nelson to include parallel power control loops as taught by Baker so as to provide for optimum power levels (**0006**).

Claim 8, Nelson discloses a device for controlling a mobile terminal's transmit power in CDMA-TDD system (**Abstract, 0013, 0048**), comprising: a receiving module, receiving a power control message from a base-station transmitted via a downlink (**0038, 0047, where Nelson discloses processors, a maintenance channel**); Nelson discloses a channel gain calculating module, acquiring a channel gain value between said mobile terminal and said base-station according to information transmitted via the downlink (**0038, Fig. 9: 930, where Nelson discloses processors and computing path loss**); Nelson discloses and a transmit power calculating and setting module, calculating a value of the transmit power of said mobile terminal according to said power control message, said channel gain value and a set processing gain value (**0038, Fig. 9: 950, where Nelson discloses processors, transmit power, it is well known in the art that the processing gain is the ratio of the spread bandwidth to un-spread bandwidth of the signal**), Nelson discloses adjusting the transmit power of said mobile terminal according to said value of the calculated transmit power (**Fig. 9: 975, where Nelson disclose increasing power**), Nelson discloses wherein said adjusting the transmit power of said mobile terminal is synchronized with those of other terminals assigned within a same time slot for simultaneous adjustment (**Abstract, 0051, 0052, where Nelson discloses adjusted power based on synchronization signal**).

Nelson does not explicitly disclose wherein the value of the transmit power of said mobile terminal and said other terminals assigned within the same time slot are simultaneously calculated.

In an analogous art, Baker discloses wherein the value of the transmit power of said mobile terminal and said other terminals are simultaneously calculated (**0026, where Baker discloses parallel power control loops and controlling the power of uplink transmissions**). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Nelson to include parallel power control loops as taught by Baker so as to provide for optimum power levels (**0006**).

Claim 15, Nelson discloses a mobile terminal in CDMA-TDD system (**Abstract, 0013, 0048**), Nelson discloses a receiving means, receiving and processing wireless signals from a downlink (**0038, 0047, where Nelson discloses processors, a maintenance channel**); Nelson discloses a transmitting means, transmitting wireless signals via a uplink (**0038, Abstract where Nelson discloses a processor, reply in the reverse link**); Nelson discloses a transmit power control means, receiving a power control message transmitted via the downlink (**0038, 0047, where Nelson discloses processors, a maintenance channel**); Nelson discloses after acquiring a channel gain value between said mobile terminal and a base-station, calculating a value of the transmit power of said mobile terminal according to said power control message, said channel gain value and a set processing gain value (**Fig. 9: 910-950, where Nelson discloses calculating the transmit power value, it is well known in the art that the processing gain is the ratio of the spread bandwidth to un-spread bandwidth of the signal**), Nelson discloses adjusting the transmit power of said mobile terminal according to said value of the transmit power (**Fig. 9: 975, where Nelson disclose**

**increasing power**), Nelson discloses wherein said adjusting the transmit power of said mobile terminal is synchronized with those of other terminals assigned within a same time slot simultaneous adjustment (**Abstract, 0051, 0052, where Nelson discloses adjusted power based on synchronization signal**).

Nelson does not explicitly disclose wherein the value of the transmit power of said mobile terminal and said other terminals assigned within the same time slot are simultaneously calculated.

In an analogous art, Baker discloses wherein the value of the transmit power of said mobile terminal and said other terminals are simultaneously calculated (**0026, where Baker discloses parallel power control loops and controlling the power of uplink transmissions**). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Nelson to include parallel power control loops as taught by Baker so as to provide for optimum power levels (**0006**).

**Claims 2, 6, 9, 13, 16 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nelson in view of Baker in view of Chen et al. (US 20030134655 herein Chen).**

Claim 2, Nelson in view of Baker does not explicitly disclose wherein said power control message at least includes items of background noise, inter-cell interference power level and target signal-to-interference ratio which have changed.

In an analogous art, Nelson discloses wherein said power control message at least includes items of background noise, inter-cell interference power level and target

signal-to-interference ratio which have changed **(0081, where Nelson discloses updated quality metrics)**. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Nelson in view of Baker with the teachings of Chen so as to allow for rapid power adjustment **(0012)**.

Claim 6, Nelson in view of Baker does not disclose wherein when said power control message changes, the mobile terminal receives said power control message broadcast via the downlink.

In an analogous art, Chen discloses when said power control message changes, the mobile terminal receives said power control message broadcast via the downlink **(0070)**. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Nelson in view of Baker with the teachings of Chen so as to allow for rapid power adjustment **(0012)**.

Claim 9, as analyzed with respect to the limitations as discussed in claim 2.

Claim 13, as analyzed with respect to the limitations as discussed in claim 6.

Claim 16, as analyzed with respect to the limitations as discussed in claim 2.

Claim 20, as analyzed with respect to the limitations as discussed in claim 6.



***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MEHMOOD B. KHAN whose telephone number is (571)272-9277. The examiner can normally be reached on Monday - Friday 8:30 am - 5:00 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester Kincaid can be reached on 571-272-7922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

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Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Mehmood B. Khan/  
Examiner, Art Unit 2617

/Lester Kincaid/  
Supervisory Patent Examiner, Art Unit 2617